B. AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning on page 7, line 8 with the following amended paragraph:

The invention also comprises a method of producing nanostructured sensing element using deposition of materials inside the pores of anodic alumina. The method includes providing an alumina film having a plurality of elongated parallel pores, and depositing a sensing material in the pores, wherein the pores have an average diameter of 300 nm or less. The resulting nanostructured sensing element comprises [[on]] one or more material materials selected from the group consisting of metals, non-metals, oxides, salts, polymers, and other organic and inorganic compounds. The sensing material may be deposited in the pores, for instance, by electrodeposition, solgel processes, solution impregnation, spin-coating, spray-coating, gas phase physical deposition and chemical vapor deposition.